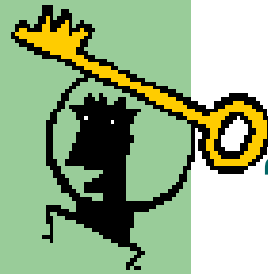
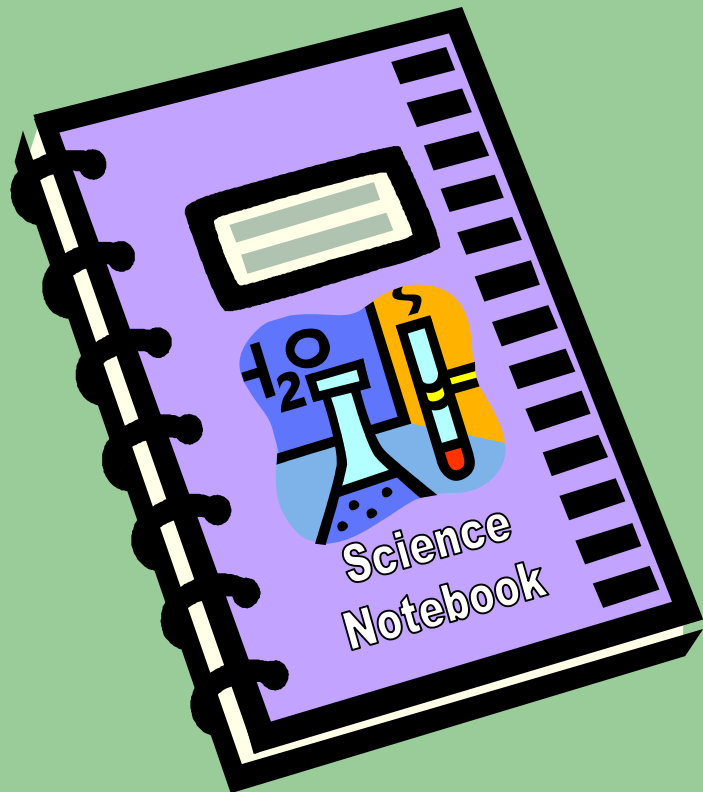


# SCIENCE INTERACTIVE NOTEBOOK



“Your Key To Success  
in Science”



**Have you ever heard yourself say .**

**I can't find my . . .  
notes, homework, old quizzes . . .**

**I can't remember what  
we did in class yesterday.**

**I'm sure its in . . .**

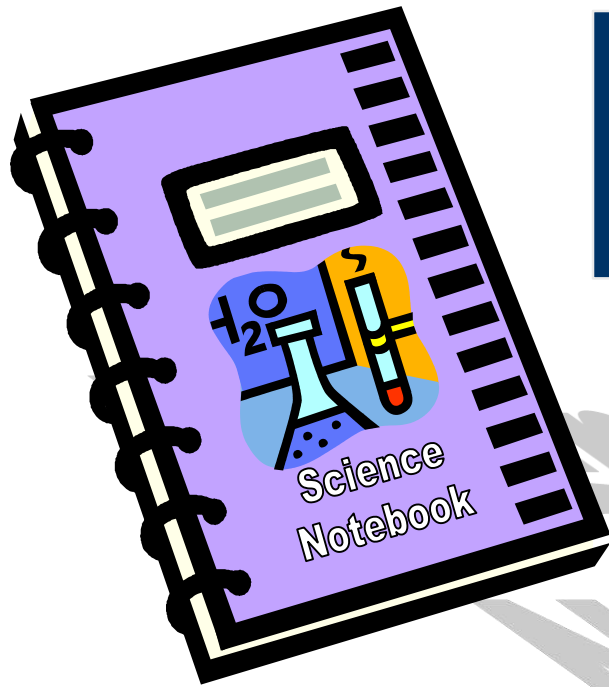
**my locker . . .**

**my book bag . . .**

**my room . . .**

**I was absent last week, did I miss anything?**

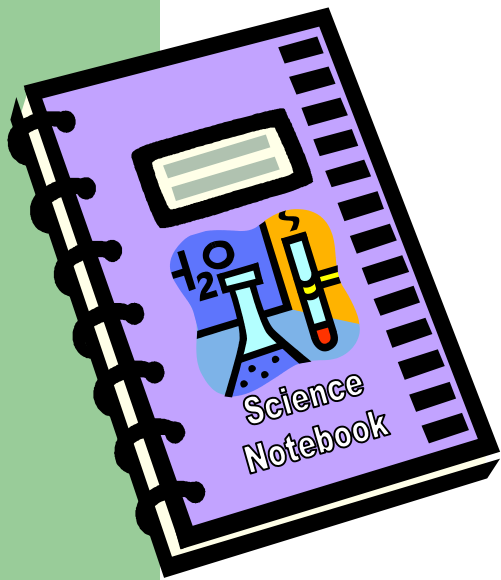
**Well Here's Your Answer..**



**Interactive**

**Notebook**

# What is An Interactive Notebook



- ❖ A interactive notebook (INB) your own personalized **DIARY** of learning about science
- ❖ A portfolio of your work in **ONE** convenient spot. This is **great for studying for upcoming quizzes & test**
- ❖ A great **ORGANIZATIONAL** tool that gives you permission to be **PLAYFUL AND CREATIVE** in your responses without "messing up" your notes.
- ❖ Allows you to be like a **REAL SCIENTIST!**



# Real Scientist Use Notebooks

D  
I  
A  
N  
F  
O  
S  
S  
E  
Y

22 9  
Mama  
Baby King  
954

October 11. Yesterday Nemaye found Group 4 in the middle of the wide slope before Swallow Slopes under a large Hagena at that point. We found their track descending across our path in nettles and went higher, to edge of Swallow Slope to make sure it had been their track before returning near Kuanguka tree to descend into nettles to find last night's nests. They were spread out over 130' with U.B. nested near Papoose, (some 4' off ground) and Simba in little nest by his side and all under shelter of Hypericum - it had poured rain the previous night. ~~As the way we had found Maki's tracks on our trail beneath the~~ The biggest puzzle was the finding of a female's nest with infant Jung of a day and a half, or approximately less than 2 months. The Jung and nest appeared to be only one day older than the other nests, but that's not for certain. My final conclusion is that Maki has given birth even though the nest that must have been Semson's didn't have large enough dung in it. The trail then went into the Hypericums and up onto the base of Honey Man's Ridge. We found the group feeding on the opposite slopes - i.e. Ambassador's Ridge, at 12:30. I did not take notes for the first half-an-hour in hopes of locating Old Goat to see if she had an infant or if Maki had rejoined the group. During that half-an-hour U.B. was in a huddle with Simba, Papoose, Tiger and Augustus nearest him; Petula next; Flossie and Cleo slightly below on log with Flossie feeding; Old Goat to left of my screen with Digit above her - both the furthest animals from the group bulk. There was grooming between U.B. and Digit, and Papoose and play with youngsters. My notes begin at one o'clock. Old Goat moves into day nesting spot high above group which had in part been feeding up until now (semi-sunny); Digit at first lower than she but also at same time settles into day nest spot. U.B. self-grooming on inverted lobelia top which served as his nest at this time. Tiger laying against Papoose with Augustus between them and U.B. Flossie eating a few bet further on (she had climbed up to group bulk with Cleo playing behind her with foliage. Tiger uphill from her about 6' only apart from his mother a good 140' and Simba is above him some 6'. One animal heard coughing a great deal. Digit moves off uphill and Tiger moves up abut to feed before Flossie approaches him with Cleo dorsal and takes over Tiger's nest. He only moved a few feet away and looked at her with a grin expression - open mouth and playful. Cleo goes directly over to Tiger and plops on his lap for a mild play session. Simba moves away from them at this point. Simba then further uphill alone and feeding. Papoose and Petula still laying flat. After some 10 minutes Flossie goes uphill with Cleo grabbing onto her neck and lying half-dorsal as she moves off. Flossie follows Simba's route. U.B. "again" grooming Papoose. Petula, above them, sits up as though thinking about feeding. Cleo up with Flossie tackling a small Vernonia sapling for play and feeding. U.B. still grooming Papoose's rump. Flossie feeding at 1:16. U.B. occasionally looking over in our direction very intently. Tiger and Simba begin tussling together quite strenuously with Simba holding her own well. U.B. still self-grooming at 1:17. Cleo swinging above with a smile face from a small Vernonia. Tiger and Simba still tussling at 1:20. U.B. wearing his sappy expression all day long. Much group harmony in evidence today despite overcast and eventual rain. Tiger and Simba rest abut. Below Petula is huddled over Augustus grooming him. At 1:21 Tiger and Simba



L  
E  
O  
D  
I  
V  
I  
N  
C  
I

The notebook is divided into TWO sections.

## Left Side-Right Side: WHICH SIDE?

- The **Left SIDE “LOVES”** student work. This is the side that you can use to show me your creativity. **This is the “output” or product side.**
- The Right side is **“RESTRICTED”** and contains only **information given by Mrs. Talley**. **Nothing else should be placed on the RIGHT SIDE!!**

The notebook is divided into TWO sections.

LEFT side “loves”

RIGHT side is “restricted” to

STUDENT work = OUTPUT

TEACHER INPUT

 WARMUP #1 Fill in the missing word.

*Decomposer Producer Consumer*

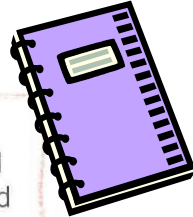
Plants are \_\_\_\_\_. Lions, tigers, and bears are \_\_\_\_\_. Worms and mushrooms are \_\_\_\_\_.



A food web is made up of several linked food chains. The energy source flows through all the parts of the food web.

4.5c

Flow of energy through food webs



All organisms are part of a food web. Several food chains, which are linked, make up a food web. A food chain identifies the roles organisms use to get the food they need to survive. The sun, which is the source of energy, is the start of food chains. Food chains also contain producers, consumers, and decomposers. A producer is a plant. Plants use sunlight to make food. The greatest amount of energy in a community is in the producers. Primary, first-level, consumers are animals that eat plants. Secondary, second-level consumers, eat an animal for their food source. You have heard these called herbivores, carnivores, and omnivores. Do you remember the difference? Decomposers are organisms that break down wastes and dead plants or animals. The sun's energy cycles through ecosystems from producers through consumers and back into the nutrient pool through decomposers.

- ① eat Plants
- ② eat animal
- ③ eat both

For example, a simple food chain might be the sun, grass, mouse, fox, and maggots. In this food chain what is the producer? What is the decomposer? What is the source of energy? This food chain is part of a larger food web. Can you see that changing the mouse to a rabbit makes a different food chain but in the same food web? What other chains in this food web could we create? Can you identify which are primary/secondary consumers, producers, and decomposers?

#2



# LEFT SIDE= YOUR SIDE

- The **LEFT SIDE** belongs to you.
- It contains your creative **INTERPRETATION** of what you learned in the day's activity (**LIGHTBULB**). On this page you may include **diagrams, cartoons, drawings, poems, foldables, etc.** **Let your CREATIVITY go wild!**

**EVEN PAGES = 2,4,6,8,10...YOU GOT IT..**

# WARMUP #1 Fill in the missing word.

*Decomposers Producers Consumers*

Plants are \_\_\_\_\_. Lions, tigers, and bears are \_\_\_\_\_. Worms and mushrooms are \_\_\_\_\_

Example of student interpretation of the

## DAY'S ACTIVITY

placed on the **LEFT** side of the notebook

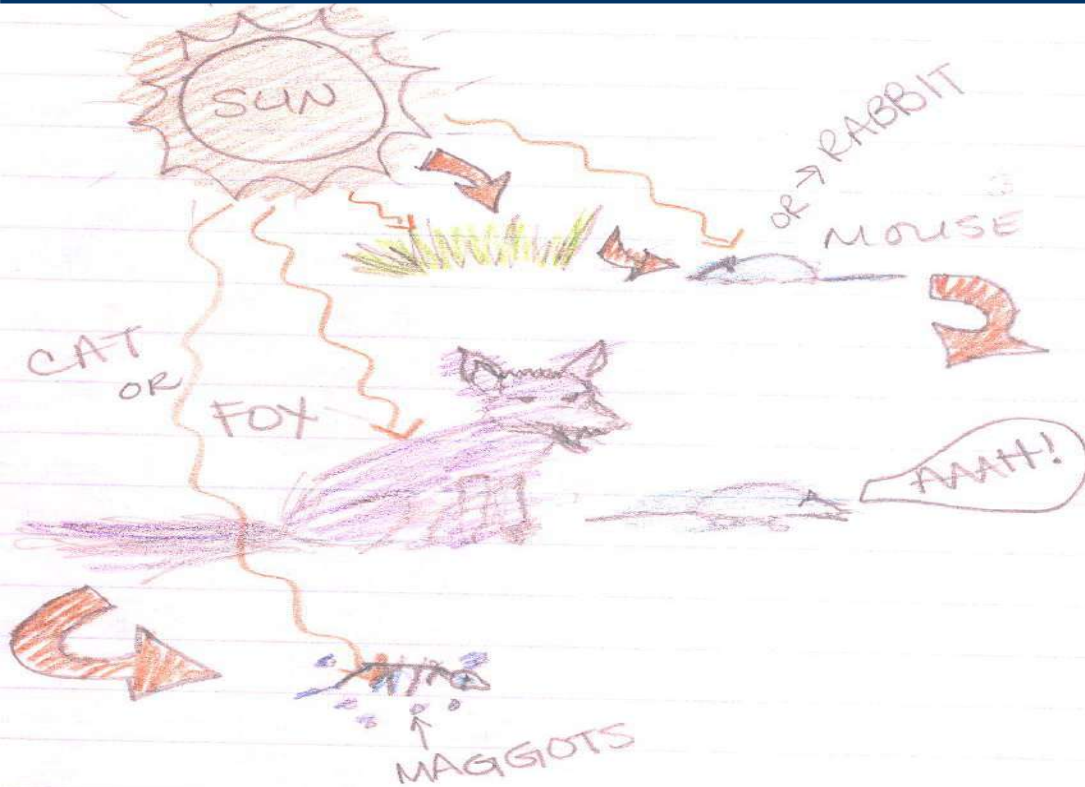


**INCLUDES:**

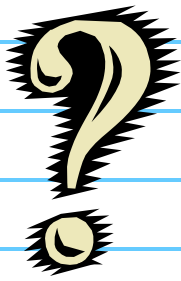


WARM-UP

DAY'S ACTIVITY



A food web is made up of several linked food chains. The energy source flows through all the parts of the food web.



# WARM-UP #1

Fill in the missing word.

*Decomposer Producers Consumers*

Plants are \_\_\_\_\_. Lions, tigers, and bears are \_\_\_\_\_. Worms and mushrooms are \_\_\_\_\_.

This “warm-up” is either on the whiteboard or on Powerpoint. It acts as a review before the start of class and should be completed within the first FIVE minutes of class. This is **INPUT given by the teacher**; therefore, it is written on the **RIGHT** side and completed by the student.



A food web is made up of several linked food chains. The energy source flows through all the parts of the food web.

# LEFT SIDE

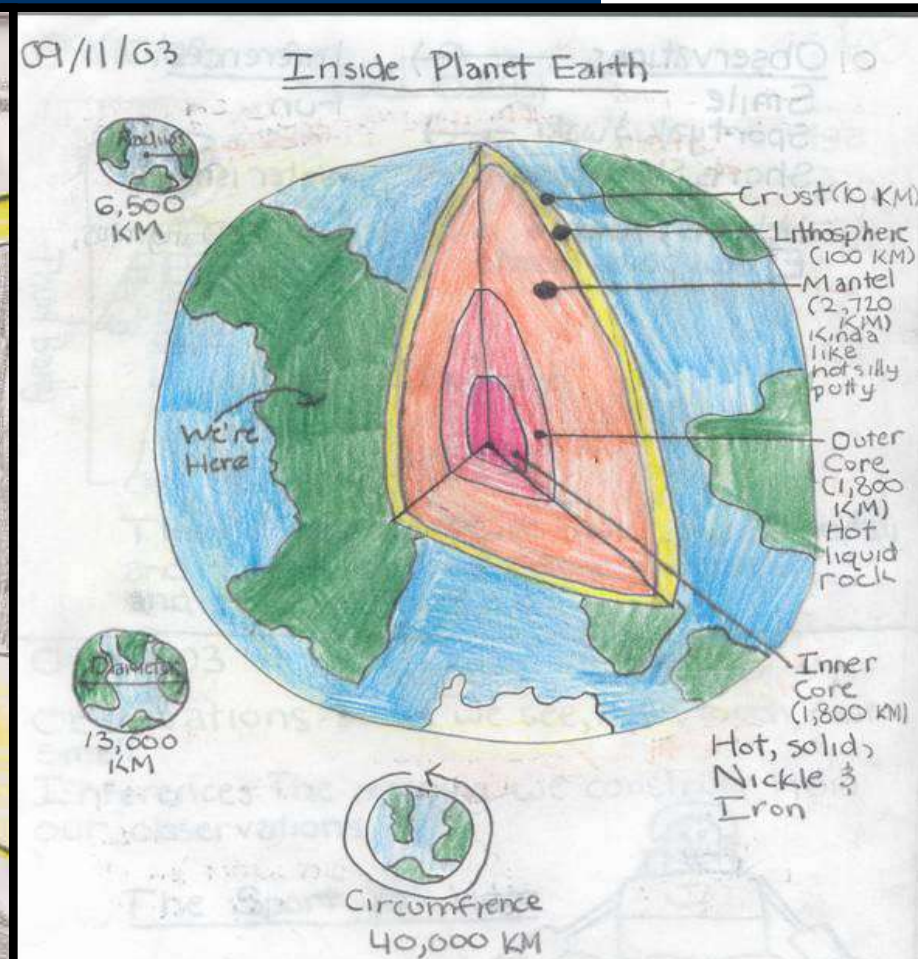
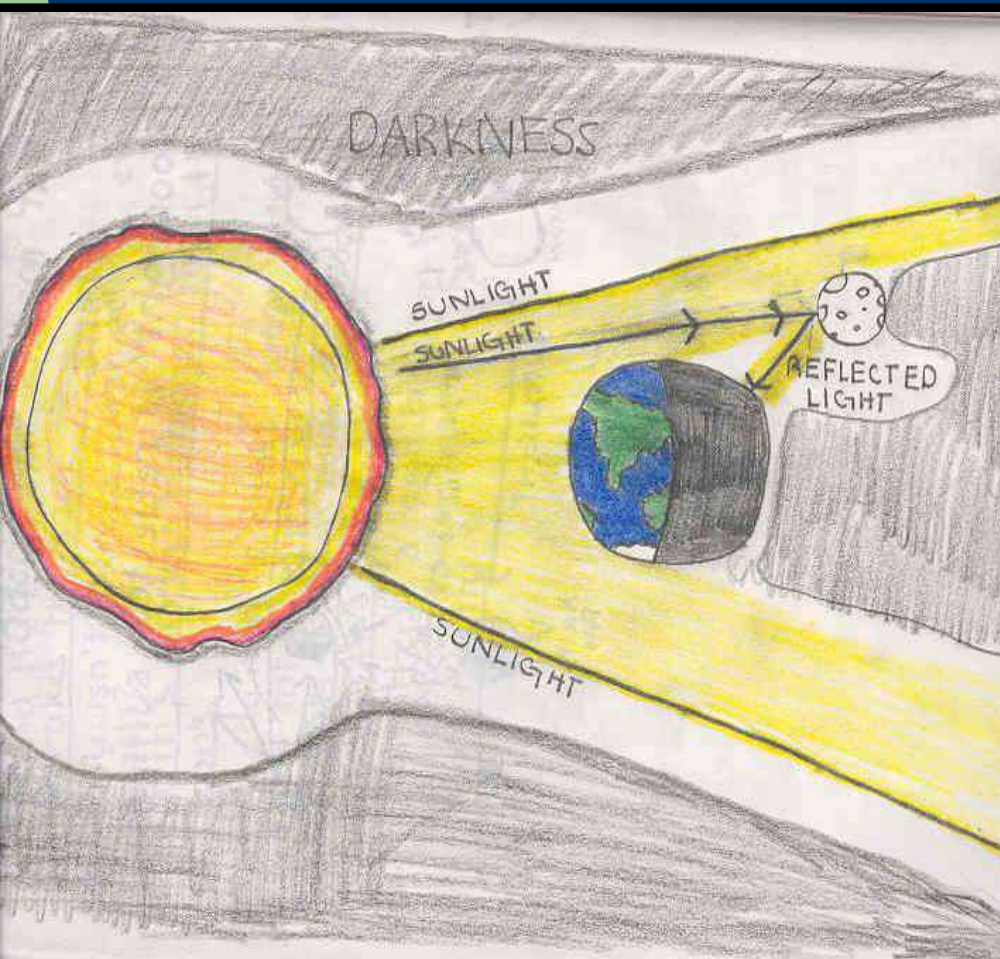
The day's activity is placed on the **LEFT** or **OUTPUT** side of the notebook. This is indicated with a **yellow light bulb** icon symbolizing that this is how the input makes sense to the student. This section acts as a **reinforcement** for the **RIGHT** or **INPUT** side and is the student's interpretation of what the **WARMUP** means to him/her. **This side entails hands on, tactile learning**

# Examples of Left Side Assignments

- Science Warm-Ups
- Graphic Organizers
- Drawings/Illustrations
- Poems, Rap Songs
- Cartoons/Comics
- Lab Analysis
- Teach Your Parent



# DRAWINGS/ILLUSTRATIONS



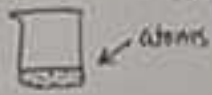
# FOLDABLES

9-11-11 11

## STATES

### PLASMA


- State of matter that has a definite volume and definite shape.
- Atoms in a solid are held tightly together.
- Solid sublimates → gas
- Solid melting → liquid (snow)



atoms

### Gas

- State of matter that has definite volume but no definite shape.
- Atoms in a liquid are held loosely together liquid.
- liquid evaporates → gas (gasoline)
- liquid freezes → solid (H<sub>2</sub>O → ice)



9-11-11 11

24

## Moon

TEK

The half of the moon that faces the Sun is facing away from us, so we don't see it!

We see half of the half of the moon that is lit by the Sun. A half of a half is only a quarter.

☾ Moon

Waxing Crescent

Last Quarter

Three Quarter Moon

First Quarter

Waxing Gibbous (4th Moon)

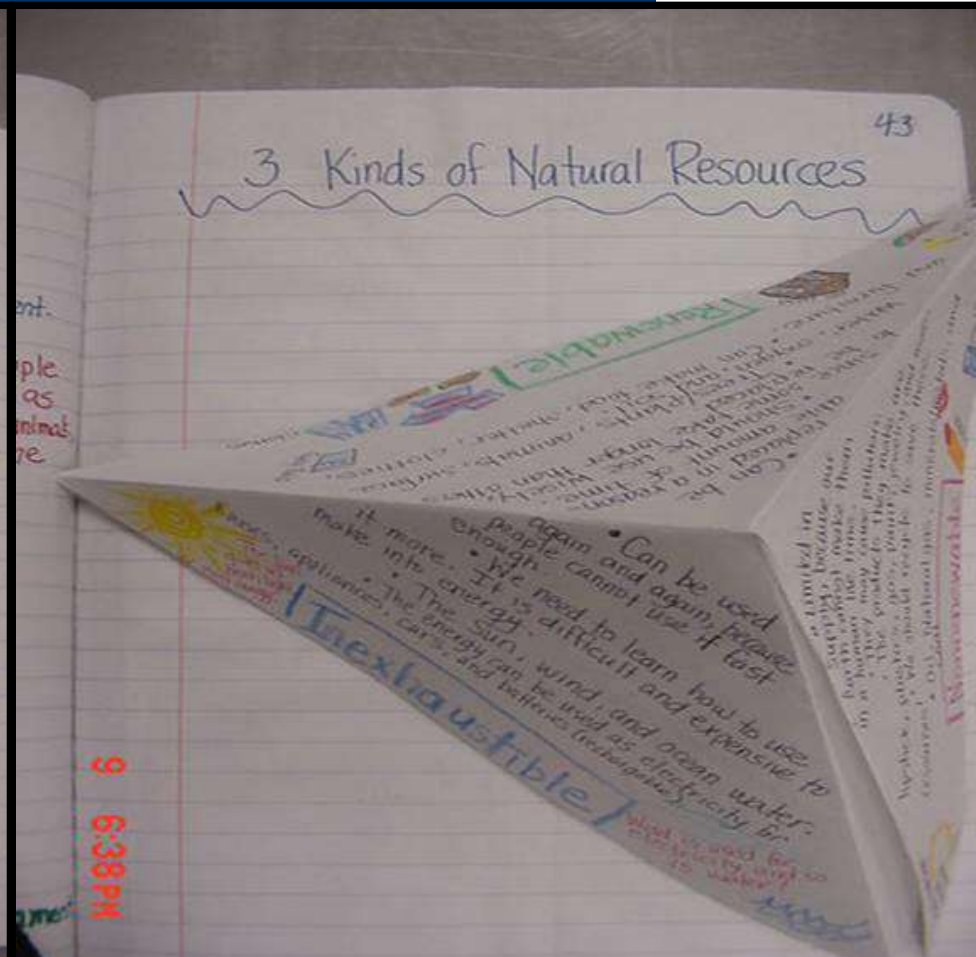
Full Moon

Freeze (Quarter)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

9:54 PM

# FOLDABLES



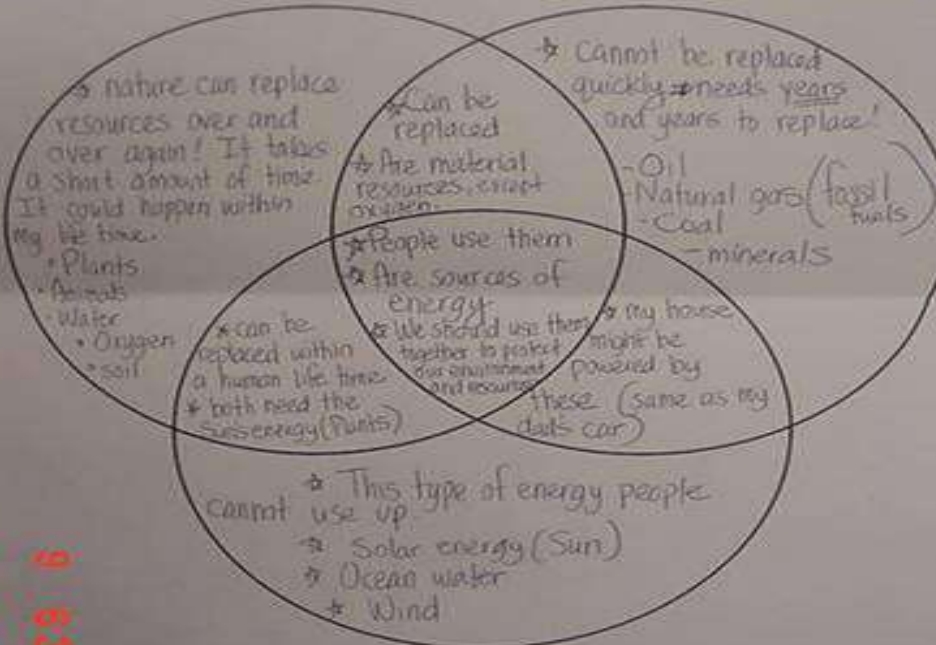


# GRAPHIC ORGANIZERS

Name Cyan Tint Date \_\_\_\_\_

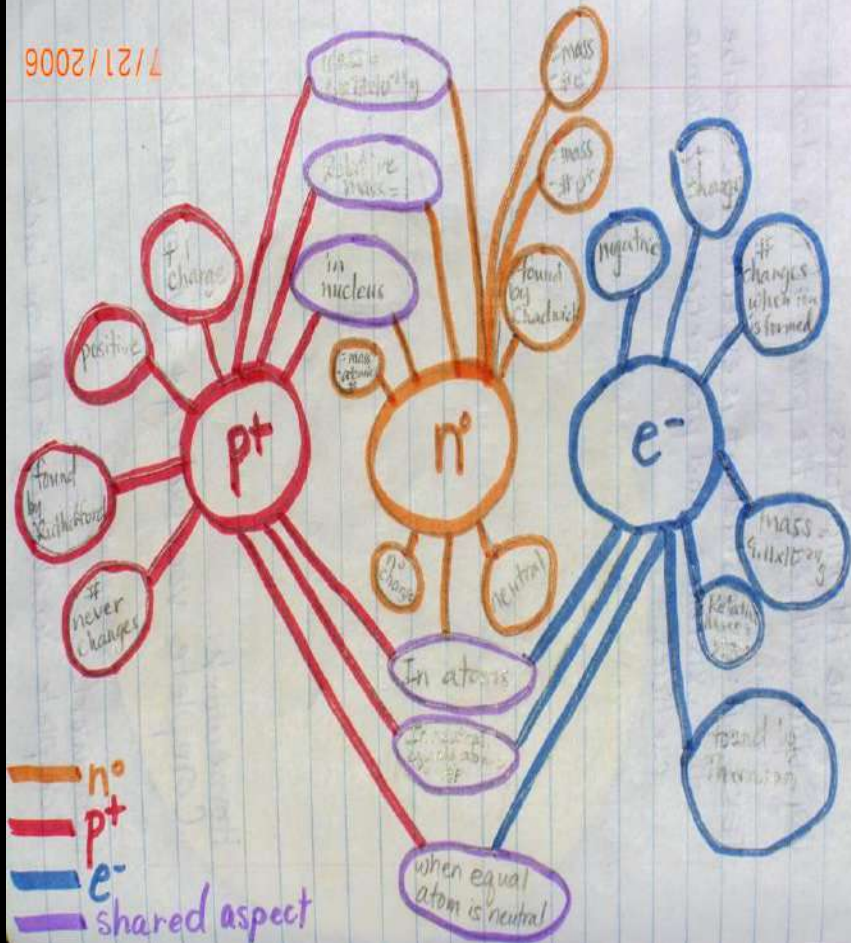
## Renewable Resources

## Nonrenewable Resources



9:03PM

9002/12/1



Triple Duote 1M  
Compare/Contrast p<sup>+</sup>, n<sup>0</sup>, e<sup>-</sup>

# RIGHT SIDE: MY SIDE



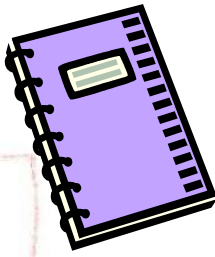
- The **RIGHT SIDE** belongs to me and should only contain **information given or “input” from Mrs. Talley**. Nothing else should be placed on this page!
- The **RIGHT SIDE** contains the **notepad icon** and will contain all the **TESTABLE material**.

**Odd Pages = 1,3,5,7,9..YOU KNOW IT.**

# RIGHT SIDE

4.5c

Flow of energy through food webs



The **RIGHT** side of the notebook contains information given to you by Mrs. Talley. It has a **purple** notepad in the corner. This is the **ESSENTIAL** information that will **DEFINITELY** be on a quiz or test. Nothing else should go on this side.

All organisms are part of a food web. Several food chains, which are linked, make up a food web. A food chain identifies the roles organisms use to get the food they need to survive. The sun, which is the source of energy, is the start of food chains. Food chains also contain producers, consumers, and decomposers. A producer is a plant. Plants use sunlight to make food. The greatest amount of energy in a community is in the producers. Primary, first-level, consumers are animals that eat plants. Secondary, second-level consumers, eat an animal for their food source. You have heard these called herbivores, carnivores, and omnivores. [Do you remember the difference?] Decomposers are organisms that break down wastes and dead plants or animals. The sun's energy cycles through ecosystems from producers through consumers and back into the nutrient pool through decomposers.

① eat plants  
② eat animal  
③ eat both

For example, a simple food chain might be the sun, grass, mouse, fox, and maggots. In this food chain what is the producer? What is the decomposer? What is the source of energy? This food chain is part of a larger food web. Can you see that changing the mouse to a rabbit makes a different food chain but in the same food web? What other chains in this food web could we create? Can you identify which are primary/secondary consumers, producers, and decomposers?

#2

# Example of Right Side "Input"

- Notes from
  - Teacher guided Powerpoint notes
  - Movie/Video
  - Article Readings
- Vocabulary words
- Lab procedures
- Study Guides

# Example of Right Side "Input"

## Moon Phases / Cycles

23

I know the moon looks different, but I don't know why or when it changes. I learned about the words full moon (all the moon shows), half moon (only half shows) and a crescent moon (only a  $\frac{1}{4}$  shows).

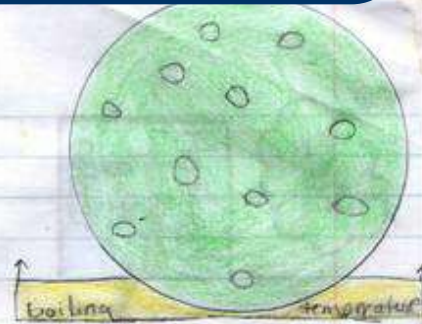
## Moon Notes

- The moon rotates around the earth.
- One side of the moon always faces the sun.
- We see different "moons" because our position around the sun changes, which changes the light of the moon as the sun hits it.
- The moon does not make (produce) its own light.
- The phases or positions of the moon we see depends on where the moon, sun, and earth are.
- There is a new moon (can't see it), first quarter, full moon, and third quarter (half moon).



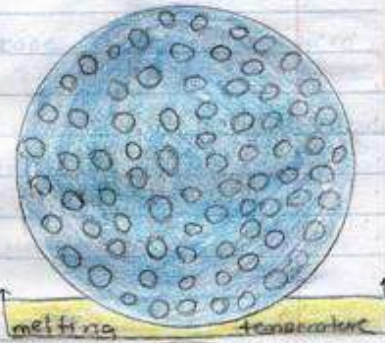
## Facts of a gas:

- The particles move fast and away from each other.
- The temperature



## Facts of a liquid:

- The particles of a substance are further apart and slide by each other. (It can't cling)
- The molecules move faster.
- The temperature increases.
- Molecules take the shape of their container.
- Liquids are denser than a gas.



## Facts of solids:

- Particles are close together.
- Molecules move slow.
- The temperature of the substance decreases.
- The substance contracts.
- A solid keeps its shape + volume.
- The particles are locked together.



# Example of Right Side "Input"

42

## Natural Resources

A Natural Resource is a material that is useful to people that comes from our environment.

To me, a natural resource is something people get from our earth to make things or to use as energy. We get our natural resources from trees and plants, water, fossil fuels, wind, and the sun.

NATURAL RESOURCES

PLANTS → you can make a house from wood → house

SUN → solar energy → house

SUN → wind energy → wind turbine

WATER → glass

Fossil Fuels → car

Pencil → pencil

Paper → paper airplane

Paper → paper cup

Paper → paper plate

Paper → paper bag

COW → meat → burger

Nature Resource =

- Supplies from our environment
- Reserves from our earth
- Things you can use from our planet

9: 6:38 PM

# What Students Are Saying About INBS

- “INB's are easy to do and worth a lot of points, so take time and effort to do them well.”
- "Always update your table of contents so papers don't get messed up - or in case of an INB check.“
- "An INB is a great tool, keep it organized!“
- "You have to spend quality time on your INB.“
- "Don't leave your INB until the last day, otherwise you may be up to the early morning hours finishing assignments.“
- "Color-code things. It looks so much better that way”
- "Keep it in order, because you never know when a notebook check might come up.“
- "Do not save your INB until the last minute. Remember, it counts as much as a test."

# Science Notebook Supplies



5-SUBJECT Spiral Notebook



HIGHLIGHTER

Scissors



Erasable pens & pencils



Markers

Glue or glue stick



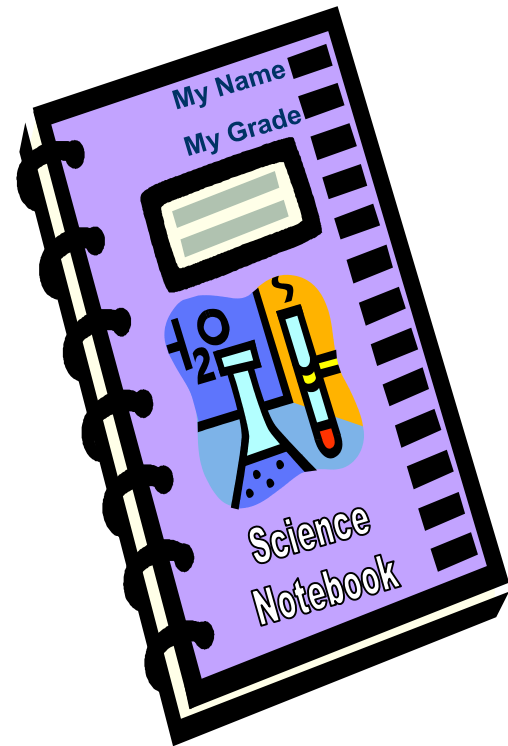
colored pencils and Crayons



# Getting Started: Step 1

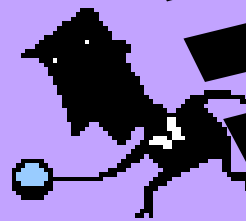
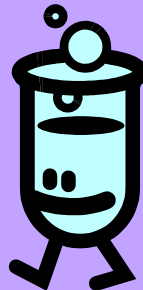
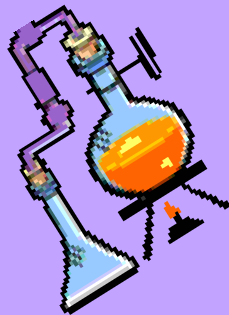
On the first page in your notebook, please write the following:

- The name of the course:
  - My Adventures in 6<sup>th</sup> Grade Earth Science
- The words: **Interactive Science Notebook**
- The class period that you have science:
  - Period 2, for example
- The school year: **2015 – 2016**
- Your “awesome” teacher: **Mrs. Talley**
- Your name: (self explanatory)
- **TWO OR MORE SCIENCE PICTURES:**



MY ADVENTURES IN SCIENCE

INTERACTIVE  
SCIENCE  
NOTEBOOK



YOUR NAME  
YOUR CLASS PERIOD  
Mrs. Talley  
2015-2016

# STEP 2

- Starting with the 1<sup>st</sup> page, number the first 20 pages. The 1st page is 1. Numbers should be small and at the top outside corner of every page.

	<p>1</p> <p>Name</p> <p>6<sup>th</sup> Grade Earth Science</p> <p>2015-2016</p> <p>Mrs. Talley</p>	<p>2</p> <p>TABLE OF CONTENTS</p>	<p>3</p> <p>TABLE OF CONTENTS</p>
--	--	---------------------------------------	---------------------------------------

# TABLE OF CONTENTS

**LEFT SIDE: STUDENT OUTPUT**

**RIGHT SIDE: TEACHER INPUT**

Date	Title of OUTPUT	Page #	Grade
	Class Syllabus	4	N/A
	Lab Report Format	6	N/A
	Think Like a Scientist	8	N/A
	Science Glyph	10	
	My 1 <sup>st</sup> Output Interview	12	

Date	Title of INPUT	Page #	Grade
	Science Interactive Notebook Check	5	N/A
	Lab Safety Rules	7	N/A
	Earth Science Root Words	9	N/A
	Lab Roles	11	
	Importance of Goal Setting	13	

# STEP 3

- At the top of **PAGES 4-7**, write the titles of each page. Cut and glue the handouts on the correct titled page.

4	5
Class Syllabus	Science INB Rubric

6	7
Lab Report Format	Lab Safety Rules

# STEP 4

On page 10-11, you will practice completing a teacher **input** and creating a student **output**.

8 <i>Think Like a Scientist</i> <i>How will I use the guidelines to help me be successful?</i>	9 <i>Earth Science Root Words</i>	10 <i>Science Glyph</i>	11 <i>Roles in a Lab</i>
--	--------------------------------------	----------------------------	-----------------------------

# STEP 5

12

**1st Output**

13

**The Importance of  
Goal Setting**

14

**Branches of Earth  
Science Output**

15

**What is Earth  
Science? Reading  
Comprehension**

# STEP 6

16

**Safety in the Lab  
Questions**

17

**Safety in the Lab  
Reading  
Comprehension**

18

**Pre and Post-test  
Scores for Science  
Assessments**

19

**Science  
Classroom Rules  
and Expectations**



# STEP



20

Vocabulary Quiz  
Week #1

21

Vocabulary Words  
Week #2

22


COMIC-E  
Questions

23

Science Process  
Skills and Notes

# Sample Interview Output Page

MR. SAUNDERS CLASS



Interactive Notebook  
Author's Page

Name: Mr. Saunders  
Birthday: Aug. 25, 1974  
Hobbies: Tennis, Reading

Draw things that describe yourself on this page. You may also use photos, magazine cut outs, or computer art. (ex. Favorite Food, Favorite Class, Pets, Family, Favorite Movie or Book, etc.)





# NOTEBOOK RULES..

- No **RIPPED OUT** pages or torn corners
- No **DOODLING** that doesn't relate to science
- Notebook should only be used for **SCIENCE CLASS ONLY**
- **DATE AND NUMBER** each page
- All entries must go into the **Table of Contents**
- **BE COLORFUL & LOVE YOUR NOTEBOOK**



# WE ARE READY!

